

### ABSTRACT OF THE DISCLOSURE

**[0035]** The present invention is a thermal interface for IC chip cooling. One embodiment of the invention comprises a thermally conductive liquid or paste-like metal(s) disposed within a flexible, thermally conductive enclosure. The enclosure is adapted to be placed between an IC chip and a heat sink to enhance heat transfer from the chip to the heat sink, thereby enabling quicker and more efficient cooling of the chip than can be achieved by conventional techniques. In several embodiments, the thermal interface is held in place by mechanical pressure rather than by bonding, which further facilitates inspection and repair of the IC device.